

IN THE ABSTRACT:

Please replace the existing Abstract with the following Abstract.

This invention produces a realistic defocused image, without using traditional ray tracing technique, by correctly converting the scale of original pixels correctly to the linear scale of ~~mount~~amount of light and summing up defocused disks of every pixel in an original image. The result of this process is bright and sparkling defocused disks of bright [[spot]]spots previously only possible with ray tracing technique [[but]]and completely missing in [[the]]conventional imaging software. This invention enables a personal user to create defocused images in order to create and increase the sense of field depth, which is an important part of daily photographic and imaging work. The input image can be scanned data from photographic films, data from digital cameras, or computer generated images after three-dimensional rendering. A user can control how the scale of pixel is converted to amount of light, which is equivalent to altering film characteristics, and also can change the shape of an aperture in order to make the defocusing effects meet his/herhis or her artistic taste.